Please amend claims 1-11 as follows:

1. **(Amended)** [Method] A method for computer-supported error analysis of at least one of sensors [and/or] and actuators in a technical system [that is present in the], the error analysis being in a form of a status-finite description that exhibits statuses of the technical system, the method using a computer[.], comprising the steps of:

a) determining [whereby] a status-finite description of the technical system [is determined] for [the] an error case [for] of an error of at least one of a sensor [and/or of] and an actuator in the technical system;

b) determining [whereby] a first set of achievable statuses [is determined] for the technical system;

c) determining [whereby] a second set of achievable statuses [is determined] for the [error-effected] technical system having an error;

d) forming [whereby] a difference set [is formed] from the first set and the second set; and

e) determining [whereby] result conditions [are determined] from the difference set, [these] the result conditions meeting prescribable conditions.

2. **(Amended)** [Method] The method according to claim 1, [whereby] wherein method steps a) through f) are implemented for all possible errors of sensors and/or actuators [that] is the technical system [comprises].

3. **(Amended)** [Method] The method according to claim 1 [or 2, whereby] wherein failure probabilities are allocated to the sensors and/or actuators; and [whereby] wherein the error analysis ensues taking the failure probabilities into consideration.

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4. **(Amended)** [Method] The method according to claim 1, wherein [one of the claims 1 through 3, whereby] method steps b) and c) [ensues] ensue according to [the] a method of model checking.

5. **(Amended)** [Method] The method according to claim 1, wherein [one of the claims 1 through 4, whereby] a status-finite description of a process implemented by the technical system is [taken into consideration] included in the method.

6. **(Amended)** [Method] The method according to claim 1, wherein [one of the claims 1 through 5, whereby] the status-finite description is realized by a finite automat.

7. **(Amended)** [Method] The method according to claim 6, [whereby] wherein the status-finite is realized by a finite automat in [the] a form of a binary decision diagram [(BDD)].

8. **(Amended)** A method for [Employment of the method according to one of the claims 1 through 7 in] rapid prototyping of [the] a technical system[.], the system having at least one of sensors and actuators in a technical system, the prototyping being in a form of a status-finite description that exhibits statuses of the technical system, the method using a computer, comprising the steps of:

a) determining a status-finite description of the technical system for an error case of an error of at least one of a sensor and an actuator in the technical system;

b) determining a first set of achievable statuses for the technical system;

c) determining a second set of achievable statuses for the technical system having an error;

d) forming a difference set from the first set and the second set; and

e) determining result conditions from the difference set, the result conditions effecting prototyping of the technical system.

9. **(Amended)** A method for [Employment of the method according to one of the claims 1 through 7 in the framework of] error diagnosis of [the] a technical system[.], the system having at least one of sensors and actuators in a technical system, the error diagnosis being in a form of a status-finite description that exhibits statuses of the technical system, the method using a computer, comprising the steps of:

a) determining a status-finite description of the technical system for an error case of an error of at least one of a sensor and an actuator in the technical system;

b) determining a first set of achievable statuses for the technical system;

c) determining a second set of achievable statuses for the technical system having an error;

d) forming a difference set from the first set and the second set; and

e) determining result conditions from the difference set, the result conditions effecting error diagnosis of the technical system.

10. **(Amended)** A method [Employment of the method according to one of the claims 1 through 7] for generating critical test cases for a commissioning and a system test of [the] a technical system[.], the system having at least one of sensors and actuators in a technical system, the generating being in a form of a status-finite description that exhibits statuses of the technical system, the method using a computer, comprising the steps of:

a) determining a status-finite description of the technical system for an error case of an error of at least one of a sensor and an actuator in the technical system;

b) determining a first set of achievable statuses for the technical system;

c) determining a second set of achievable statuses for the technical system having an error;

d) forming a difference set from the first set and the second set; and

e) determining result conditions from the difference set, the result conditions effecting the generation of critical test cases.

11. **(Amended)** A method [Employment of the method according to one of the claims 1 through 7] for preventive maintenance of [the] a technical system[.], the system having at least one of sensors and actuators in a technical system, the method being in a form of a status-finite description that exhibits statuses of the technical system, the method using a computer, comprising the steps of:

a) determining a status-finite description of the technical system for an error case of an error of at least one of a sensor and an actuator in the technical system;

b) determining a first set of achievable statuses for the technical system;

c) determining a second set of achievable statuses for the technical system having an error;

d) forming a difference set from the first set and the second set; and

e) determining result conditions from the difference set, the result conditions effecting the preventive maintenance.

IN THE ABSTRACT

On page 18, please delete lines 1-3, and insert the following heading: --**ABSTRACT OF THE DISCLOSURE**--.